

Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. Applicant/Contact name and address: **Glacier Point Home Owners & Water Users Association Inc.
PO Box 7045
Helena MT 59604-7045**
2. Type of action: **Application for Beneficial Water Use Permit No. 30028560-411**
3. Water source name: **Groundwater Wells**
4. Location affected by action: **SENE SW, Sec 5, Twp 10N, Rge 3W, Lewis and Clark County**
5. Narrative summary of the proposed project, purpose, action to be taken, and objectives:
The application proposes to appropriate groundwater from two wells. The wells are located in the SENE SW of Sec 5, Twp 10N, Rge 3W, Lewis and Clark County. The wells are referred to PWS 1 and PWS 2. Lindsay Drilling, a licensed well driller drilled PWS 1 in January of 2006 to a depth of 167 feet. PWS 2 was drilled in February of 2006 to a depth of 167 feet. The applicant is requesting 60 gpm up to 42.17 acre-feet per. The water would be used for multiple domestic (85 households) from January 1 to December 31, and lawn and garden on 6.83 acres from April 1 to October 31 of each year. There is a 200,000 gallon concrete storage tank. The place of use the Glacier Point Subdivision located in the NESW of Sec 5, Twp 10N, Rge 3W, Lewis and Clark County.

The DNRC shall issue a water use permit to the applicant if the criteria in 85-2-311, MCA are met.

Agencies consulted during preparation of the Environmental Assessment:
(include agencies with overlapping jurisdiction)

**Montana Natural Heritage Program (MTNHP)
Montana Department of Environmental Quality (DEQ)
Bill Uthman – DNRC Hydrogeologist
Helena Valley Soil Survey, Lewis and Clark County**

Part II. Environmental Review

1. **Environmental Impact Checklist:**

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity - Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.

Determination: **No significant adverse impact.**

The proposed project would not affect chronically or periodically dewater streams as identified by the Department of Fish, Wildlife & Parks. The water to be diverted is from groundwater wells.

Water quality - Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.

Determination: **No significant adverse impact.**

The proposed project would not affect water quality in perennial streams. The water to be diverted is from groundwater wells.

Groundwater - Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.

Determination: **No significant adverse impact.**

The applicant has demonstrated that the water for the proposed project is physically and legally available according to DNRC evaluation procedures. The nearest surface water is Tenmile Creek, which is approximately 600 feet to the south and east of the wells. This application is subject to House Bill 831, which requires a hydrogeologic assessment that predicts whether the proposed appropriation will result in a net depletion of surface water. The applicant acknowledges a potential stream depletion impact of 13.24 acre-feet per year to nearby Tenmile Creek. The applicant therefore proposes to mitigate potential impacts. An application for mitigation has been received by the Department. See Application to Change a Water Right No. 30028566-411

DIVERSION WORKS - Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.

Determination: **No significant adverse impact.**

The project would not affect streams or riparian areas. Two wells were drilled for the proposed subdivision by Lindsay Drilling, a licensed well driller. They were drilled in accordance with the Montana Board of Water Well Contractors and the Administrative Rules of Montana and subject to DEQ requirements. The well referred to as PWS 1 was drilled in January of 2006 to a depth of 167 feet. PWS 1 has an 8⁵/₈" steel casing from +2 to 166 feet and is perforated from 136 to 154 feet. The well referred to as PSW 2 was drilled in February of 2006 to a depth of 167 feet. The well has an 8⁵/₈" steel casing from +2 to 166 feet and is perforated from 134 to 160 feet. Both of the wells were grouted with a continuous feed of bentonite clay during installation to prevent well contamination. The pumps will be stainless steel Baron high capacity pumps powered by Franklin Electric 5 HP motors.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species - Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."

Determination: **No significant adverse impact.**

According to the MTNHP there are several species of special concern in the area. There are two vascular plants, the Atriplex truncate or Wedge-leaved Saltbush and Cypripedium parviflorum or Small Yellow Lady's-slipper. There are four vertebrate animals, the Haliaeetus leucocephalus or Bald Eagle, Canis lupus or Gray Wolf, the Spizella breweri or Brewer's Sparrow and the Dolichonyx oryzivorus or Bobolink. None of the species are in the immediate project area boundaries. Enclosed with the information was an Inferred Extent Report for the Bald Eagle. Inferred Extents are areas that can be inferred to be probable occupied habitat based on the spatial location of the direct observation of a species and general information available for the foraging area or home range size of the species. Although antelope, deer and small mammals frequent this area, the proposed subdivision is not located in an area with a high wildlife resource value. Formerly, this was the location of the Valley Speedway. The proposed project would not impact any species of special concern.

Wetlands - Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.

Determination: **No functional wetlands have been identified.**

Ponds - For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.

Determination: **No pond development is involved in this project.**

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.

Determination: **No significant adverse impact.**

The predominant soil type based on the Helena Valley Soil Survey is Nippt-Attewan Complex. A typical profile of the Nippt soil; the surface layer is light brownish gray gravelly loam 3" thick. The subsoil is brown gravelly clay loam 6" thick. The substratum is light gray extremely gravelly loam to 15 inches. Below this, to a depth of 60" is light gray extremely gravelly sand. A typical profile of the Attewan soil; the surface layer is brown loam 4" thick. The subsoil is in two parts. The upper part is brown clay loam 6" thick. The lower part is very pale brown loam 5" thick. The substratum is very pale brown loam to 23 inches and light yellowish brown extremely gravelly sand below. The Lewis and Clark County Water Resources Survey shows the soil complex is good mainly for road fill because of the extremely gravelly sandy soil. The soils are classified as severe for lawns but can probably sustain a healthy lawn with a veneer of topsoil

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.

Determination: **No significant adverse impact.**

The existing vegetative cover will be disturbed during the construction phase. This may allow for the establishment or spread of noxious weeds. Noxious weeds including spotted knapweed are located mostly along Interstate 15 in the project area. This should be controlled after the homes are in and lawn and garden areas established. Owners will be responsible for weed control on their own lots. All disturbed areas would be re-vegetated to provide erosion control.

AIR QUALITY - Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.

Determination: **No significant adverse impact.**

There may be a deterioration of air quality during the construction phase of the subdivision. There may be a more permanent deterioration of air quality due to the increased traffic within the subdivision. In addition, if any of the homes have wood burning stoves/fireplaces that are burned improperly, there may be noticeable or objectionable odors that could affect air quality and/or be offensive to other property owners. This impact would be temporary during the winter months when there is an air inversion.

HISTORICAL AND ARCHEOLOGICAL SITES - Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.

Determination: **No significant adverse impact.**

The Montana State Historic Preservation Office (SHPO) was not contacted about this project. This is the site of the former Valley Speedway and any historic or archaeological sites would probably have been destroyed when the Speedway was constructed. This project is located on private property and it is at the landowner's to conduct a reconnaissance survey.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - Assess any other impacts on environmental resources of land, water and energy not already addressed.

Determination: **No additional impacts on environmental resources of land, water and energy not already addressed were identified.**

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.

Determination: **No significant adverse impact.**

Over fifty years ago the proposed project was agricultural land. In 1958 it was purchased by the Valley Speedway Corporation and a race track was constructed. The speedway closed in the early sixties and since that time the land changed hands, but it is unknown

what it was used for. The project fits with the existing development in the area. Although close in proximity to the interstate, access is not directly available.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.

Determination: **No significant adverse impact.**

The proposed project would not impact access to or the quality of recreational and wilderness activities. There are no recreational or wilderness areas adjacent to the proposed project.

HUMAN HEALTH - Assess whether the proposed project impacts on human health.

Determination: **No significant adverse impact.**

The subdivision would use a combination of on-site systems and a public system for waste water. Each lot will have an individual septic tank to remove floatable and settleable solids in the raw sewage and provide primary treatment. Each lot will also have an individual Eliminite treatment system. These systems use a natural biological process to remove nutrients in the wastewater. The system has been reviewed by DEQ and has been determined to provide Level II wastewater treatment. An effluent discharge permit has been issued from DEQ for this public wastewater system. A copy of the permit is in the file.

PRIVATE PROPERTY - Assess whether there are any government regulatory impacts on private property rights.

Yes ☐ No ☒. If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.

OTHER HUMAN ENVIRONMENTAL ISSUES - For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.

Impacts on:

- (a) Cultural uniqueness and diversity? **No significant adverse impact.**
- (b) Local and state tax base and tax revenues? **No significant adverse impact. This subdivision project should increase the local and state tax base and revenues. Although this is expected to be a positive impact, the magnitude of the potential increase in tax revenues has not been quantified.**
- (c) Existing land uses? **No significant adverse impact. The existing land use was agricultural. Then for a number of years it was the Valley Speedway. After that was closed the land use is unknown.**
- (d) Quantity and distribution of employment? **No significant adverse impact. The project has the potential to increase the demand for services in the Helena area and create employment opportunities.**
- (e) Distribution and density of population and housing? **No significant adverse impact. The development of this subdivision would increase the population growth outside the city limits of Helena. There will be 85 additional households at full development.**

- (f) Demands for government services? **No significant adverse impact.** There would be an increased demand for a number of government and local services. The residents of the subdivision would need fire and police protection, bus service to schools, medical/health care services, solid waste disposal, postal services, road maintenance, etc.
- (g) Industrial and commercial activity? **No significant adverse impact.** This subdivision is strictly for domestic and lawn and garden uses.
- (h) Utilities? **No significant adverse impact.** This proposed subdivision would create a need for new facilities for electrical power, natural gas, telephone lines, and cable lines or satellite dish services. All utilities will be installed underground in accordance with Lewis and Clark County Subdivision Regulations. Per Northwest Energy there are adequate electric and natural gas facilities in the area to provide the necessary services for this subdivision.
- (i) Transportation? **No significant adverse impact.** The street that will be impacted the most by this subdivision is Montana Avenue. Montana Avenue is the north-south route from this subdivision. It is a little over 4 miles north to the Lincoln Road interchange providing access to Interstate 15. It is approximately 4 miles south to Cedar Street interchange providing access to Interstate 15.
- (j) Safety? **No significant adverse impact.** There may be safety impacts created by the increased traffic on Montana Avenue. The subdivision would increase the need for emergency services such as fire, police and medical. The response time for the emergency services may increase due to the growth of the Helena Valley area and limited resources and personnel. The developer most likely contacted the individual services for input on the new subdivision.
- (k) Other appropriate social and economic circumstances? **No significant adverse impact.**

2. Secondary and cumulative impacts on the physical environment and human population:

Secondary Impacts: **No significant adverse impact.** There is one other pending groundwater permit application for a new subdivision in the area. There are other subdivisions in the area, both large and small. Some have individual wells and others have public water supply systems. There is one pending groundwater permit application nearby; that is Bryant # 3 Subdivision. Other subdivisions within the area are Bryant Subdivision, Pleasant Valley, Grass-land, Mungar Tracts, Fawn Meadows, Ten Mile Estates, and Riddock to name a few. Some of them are across the interstate. No secondary impacts have been identified at this time.

Cumulative Impacts **All foreseeable development in the vicinity of the proposed project will rely on groundwater from the alluvial aquifer or underlying fractured bedrock. If the growth rate in the Helena Valley continues at the present rate it is impossible to determine what the cumulative impacts from this project may be. There are no impacts anticipated. There have been no cumulative impacts identified at this time.**

3. Describe any mitigation/stipulation measures: **The Water Right Permit if issued would be subject to all prior existing water rights in the source of supply. The applicant may be required to submit a yearly report of monthly flow rate and volume measurements to the DNRC. Periodic static water level measurements may also be required. In addition, a mitigation application has been submitted; see Application to Change No. 30028566-411.**

The application will go through the DNRC public notice procedure, and water users concerned with the potential impacts will be given the opportunity to object to the application. The decision by the DNRC to grant or deny the application would not be made until these review processes are completed.

4. Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider: **The no action alternative would prevent the applicant from obtaining water to develop a community water system for the subdivision. If the application was not granted, the individual lot owners in the subdivision would have to construct their own wells. The result could be a greater potential for an adverse impact to water quantity and quality because of the large number of wells that would be drilled to service 85 homes.**

PART III. Conclusion

1. Preferred Alternative: **Issue the permit as applied for by the applicant, or in some modified form considered reasonable. As stated above the potential for adverse affect would seem to be greater with 85 new wells being constructed in the area.**
2. Comments and Responses: **There have not been comments or responses at this time.**
3. Finding:
Yes ___ No **X** Based on the significance criteria evaluated in this EA, is an EIS required?

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: **Based on a consideration of the criteria found in DNRC Administrative Rule 36.2.524, "Determining the Significance of Impacts," there is not a significant adverse impact. An EA is sufficient for this level of action. The possible impacts from the community water system and wells for the subdivision are not significant adverse impacts and thus do not warrant and EIS.**

Name of person(s) responsible for preparation of EA:

Name: **Kathy Arndt**
Title: **Water Resources Specialist**
Date: **November 26, 2007**